

CLAIMS

What is claimed is:

1. A power ratchet wrench assembly comprising:
a handle portion;
a head portion adjacent the handle portion, the head portion comprising a head body, a first gear, a second gear, and a ratchet mechanism having a drive body,
wherein the drive body is alternately:
coupled to the first gear and ratcheting with the second gear, and
coupled to the second gear and ratcheting with the first gear.
2. The power ratchet wrench assembly of claim 1, wherein the second gear is coupled to the head body.
3. The power ratchet wrench assembly of claim 1, wherein the ratchet mechanism comprises at least one pawl for alternately coupling the drive body to the first and second gears.
4. The power ratchet wrench assembly of claim 1, wherein the ratchet mechanism comprises:
a first pawl pivotally attached to the drive body having teeth on at least one end thereof disposed for engagement with the first gear; and
a second pawl pivotally attached to the drive body having teeth on at least one end thereof disposed for engagement with the second gear.
5. The power ratchet wrench assembly of claim 1, wherein at least one of the first gear and second gear is an internal gear.
6. The power ratchet wrench assembly of claim 1, wherein the first gear reciprocates within

the head body to rotate the drive body in a first direction.

7. The power ratchet wrench assembly of claim 1, further comprising means for attaching the ratchet mechanism to the head body; wherein the means are positioned external to the head body.

8. A power ratchet wrench assembly comprising: ✓
 a handle portion;
 a head portion adjacent the handle,
 a yoke comprising an internal gear positioned within the head portion, and
 a ratchet mechanism positioned at least partially within the internal gear;
 wherein the operation of the ratchet mechanism does not require a tensioning means for applying a frictional force against the ratchet mechanism to inhibit rotational movement of the ratchet mechanism.

9. The power ratchet wrench assembly of claim 8, wherein the yoke comprises a first internal gear member and a second internal gear member.

10. The power ratchet wrench assembly of claim 9, wherein the second internal gear member is coupled to the head portion.

11. The power ratchet wrench assembly of claim 9, wherein the ratchet mechanism comprises a rotatable drive body and a first and a second pawl pivotally mounted thereon, the first pawl having teeth on at least one end thereof disposed for engagement with the first internal gear member and the second pawl having teeth on at least one end thereof disposed for engagement with the second internal gear member.

12. The power ratchet wrench assembly of claim 11, wherein the drive body is coupled to and rotates with the first internal gear member by engagement of the first pawl when the first

internal gear member is rotated in a first rotational direction and wherein the drive body rotates within the second internal gear member by the ratcheting of the second pawl when the first internal gear member is rotated in the first rotational direction.

13. The power ratchet wrench assembly of claim 12, wherein the drive body is coupled to the second internal gear member by engagement of the second pawl when the first internal gear member is rotated in a second rotational direction and wherein the drive body rotates within the first internal gear member by the ratcheting of the first pawl when the first internal gear member is rotated in a second rotational direction.

14. The power ratchet wrench assembly of claim 9, wherein the second internal gear member is formed as a sleeve housed within a recess of the first internal gear member.

15. The power ratchet wrench assembly of claim 9, wherein the second internal gear member is positioned adjacent the first internal gear member.

16. The power ratchet wrench assembly of claim 8, further comprising means for attaching the ratchet mechanism to the head portion; wherein the means are positioned external to the head portion.

17. The power ratchet wrench assembly of claim 16, wherein the head portion comprises a first ear and a second ear, and wherein the means for attaching the ratchet mechanism to the head portion comprises a first mechanical fastener engaging the ratchet mechanism external to the first ear and a second mechanical fastener engaging the ratchet mechanism external to the second ear.

18. The power ratchet wrench assembly of claim 17, wherein the first and second mechanical fasteners are retaining rings.

19. The power ratchet wrench assembly of claim 8, wherein the head portion comprises a

first ear and a second ear, wherein the second ear comprises an internal gear.

20. The power ratchet wrench assembly of claim 19, wherein the ratchet mechanism comprises a rotatable drive body and a first and a second pawl pivotally mounted thereon, the first pawl having teeth on at least one end thereof disposed for engagement with the internal gear of the yoke and the second pawl having teeth on at least one end thereof disposed for engagement with the internal gear of the second ear.

21. The power ratchet wrench assembly of claim 20, wherein the drive body is alternately: coupled to the yoke and ratcheting within the second ear, and coupled to the second ear and ratcheting within the yoke.

22. The power ratchet wrench assembly of claim 19, further comprising means for retaining the ratchet mechanism to the head portion; wherein the means are positioned external to the head portion.

23. A power ratchet wrench assembly comprising: 14
 a handle portion;
 a head portion adjacent the handle, the head portion comprising a head body, a first gear, a second gear, and a drive body;
 a first pawl pivotally attached to the drive body having teeth on at least one end thereof disposed for engagement with the teeth of the first gear; and
 a second pawl pivotally attached to the drive body having teeth on at least one end thereof disposed for engagement with the teeth of the second gear.

24. The power ratchet wrench assembly of claim 23, wherein the second gear is coupled to the head body.

25. The power ratchet wrench assembly of claim 23, wherein the drive body is coupled to

and rotates with the first gear by engagement of the first pawl when the first gear is rotated in a first rotational direction and wherein the drive body rotates with respect to the second gear by the ratcheting of the second pawl when the first gear is rotated in the first rotational direction.

26. The power ratchet wrench assembly of claim 25, wherein the drive body is coupled to the second gear by engagement of the second pawl when the first gear is rotated in a second rotational direction.

27. The power ratchet wrench assembly of claim 23, further comprising means for retaining the drive body to the head body; wherein the means are positioned external to the head body.

28. A power ratchet wrench assembly comprising:
a handle portion;
a head portion adjacent the handle portion,
a yoke comprising a first internal gear, the yoke positioned within the head portion,
a drive body positioned at least partially within the yoke and the head portion,
a first ratcheting means for mechanically locking the drive body to the internal gear of the yoke to enable rotation of the drive body in a predetermined rotational direction, and
a second ratcheting means for mechanically locking the drive body in a fixed position to prevent rotation of the drive body counter to the predetermined rotational direction.

29. The power ratchet wrench assembly of claim 28, wherein the first ratcheting means comprises a first pawl pivotally attached to the drive body having teeth on at least one end thereof disposed for engagement with the internal gear of the yoke .

30. The power ratchet wrench assembly of claim 28, wherein the second ratcheting means comprises a second internal gear coupled to the head portion and a second pawl pivotally attached to the drive body having teeth on at least one end thereof disposed for engagement with the second internal gear.

31. The power ratchet wrench assembly of claim 28, further comprising means for attaching the drive body to the head portion; wherein the means are positioned external to the head portion.